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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/889,171	09/13/2001	Igor Potucek	66477-015-5	7995

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EXAMINER

BUTLER, MICHAEL E

ART UNIT	PAPER NUMBER
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3653

DATE MAILED: 11/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/889,171

Applicant(s)

Potucek

Examiner

Michael E. Butler

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Aug 19, 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

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DETAILED ACTION

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office Action, and apply to this and any subsequent Office Actions.

Priority

1. Applicant's claim of priority as a national stage 371 application of application of PCT/SE00/00043 filed 1/13/00 which claims priority to application 9900123-2 filed 1/15/99 in Sweden is made is acknowledged.

IDS

2. The 1449 of paper 7 (filed 8/23/01) have been struck as being redundant subsets of the 1449 of the later-filed-earlier-matched IDS paper 5 (filed 9/13/01).

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-9 are rejected under 35 U. S. C. 112 second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is not apparent how close to a step something must be to qualify as "step-like".

Nor is it apparent how abrupt something must be to qualify as "generally sharp".

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

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- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States
- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

6. Claims 1, 3 and 6 are rejected under 35 U.S.C. 102(b) as anticipated by or

Zimmer , in the alternative, under 35 U.S.C. 103(a) as obvious over Zimmer.

a first robot part rotatably attached to a second robot part having a sensor (c2 L 35-44), causing at least two detectable changes to pass by the sensor which detects such changes, calculating the position of the target center, surface changes changes via a step-like notch (2) causing a comparing target position to sensed position (c2 L 54-56), calculating the position to control (c2 L 57-66);
 (Re: cl 3) calculating using a contact sensor (7)
 (re: cl 6) device for synchronizing a robot comprising
 control system (c1 L 33-38)
 first robot part and second robot part movably attached to the first robot part with
 target arranged on first robot part and sensor on second robot part (c2 L 35-44)
 target comprising step-like structural changes (2).
 Notch edges are either generally sharp or close to being generally sharp.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1 and 3-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zimmer and Nakashima et al., wherein Zimmer discloses the elements previously discussed and further discloses:

Use of shoulder (adjacent region next to 2).
 An elevation rather than a groove as the structural change (c2 L 62-64).

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Nakashima et al. Discloses any elements not explicitly taught by Zimmer.

(Re: cl 4) target comprises a groove with substantially vertical walls (11a fig 2)
(re: cl 5) target comprises an elevation with substantially vertical sides (11a fig 2)
(re: cl 7) instantaneous level difference in the form of shoulder parts (11a fig 2)
(re: cl 8) groove with substantially vertical walls (11a fig 2)
(re: cl 9) elevation with substantially vertical sides (11a fig 2).

It would have been obvious at the time of the invention to make the grooved with substantially vertical walls as in Nakashima et al. to precisely delineate preferred target timing as taught by Nakashima et al. and thereby come up with the instant invention.

It would have been obvious at the time of the invention to make the elevated target with substantially vertical sides to precisely delineate preferred target timing as taught by Nakashima et al. and thereby come up with the instant invention.

9. Claims 1-3 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zimmer and Webb et al. wherein Zimmer discloses the elements previously discussed and further discloses:

Webb et al. discloses: the use of a non-contact optical sensor for determining the rotational target position (c5 L 1-36).

It would have been obvious at the time of the invention to substitute the contact sensor of Zimmer with a non-contact sensor as in Webb et al. to avoid mechanical wear and damage to the sensor contact as taught by Webb et al. and thereby come up with the instant invention.

Response to Amendments/Arguments

10. The applicant's arguments have been fully considered but they are unpersuasive in overcoming the rejections.

The notch of Zimmer is sufficiently close to being a step to qualify as step like.

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Webb et al. and Nakashima et al. certainly have edges that are at least generally sharp.

Conclusion

11. **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Exmr. Michael E. Butler whose telephone number is (703) 308-8344.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Walsh, can be reached on (703) 306-4173. The fax number for the Group is (703) 305-7687.

Michael E. Butler

Michael E. Butler
Examiner


DONALD P. WALSH
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